AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method for detecting an analyte in a sample comprising the steps of:

   a) incubating [[a]]the sample with macromolecules, to each of which at least 2 molecules of the analyte to be detected in the sample are coupled, wherein the macromolecules are selected from the group consisting of nucleic acids, peptide nucleic acids and polyamino acids, and wherein the analyte is a hormone, an antibody, an antibiotic, a doping agent, a vitamin, a steroid, a pesticide, a psychoactive drug, or a potential biological weapon;

   b) further incubating the ~~sample~~mixture of step a) with a solid carrier, to which capture molecules for the analyte to be detected are coupled;

   c) adding a fluorescence dye to the mixture of step b) to stain the macromolecules; and

   d) detecting ~~analyte present in the sample by excitation of the~~ fluorescence dye staining the macromolecules on said solid carrier, wherein the presence of analyte in the sample will reduce the ~~signal produced by binding of the macromolecule-bound analyte to the capture molecule coupled to~~fluorescent dye on the solid carrier.

2. (Previously presented) The method according to claim 1 comprising, after step c), a further step c') of removing the non-bound fluorescence dye from the solid carrier.

3. (Currently amended) A method for detecting an analyte comprising the steps:

   a) incubating a sample with fluorescence-dye-marked macromolecules, to each of which at least 2 molecules of the analyte to be detected in the sample are directly

coupled, wherein the macromolecules are selected from the group consisting of nucleic acids, peptide nucleic acids and polyamino acids, and wherein the analyte is a hormone, an antibody, an antibiotic, a doping agent, a vitamin, a steroid, a pesticide, a psychoactive drug, or a potential biological weapon;

b) further incubating the ~~sample~~mixture of step a) with a solid carrier, to which capture molecules for the analyte to be detected are coupled, wherein the capture molecules directly bind the analyte; and

c) detecting ~~analyte present in the sample by excitation of the~~ fluorescence dye staining the macromolecules on said solid carrier, wherein the presence of analyte in the sample will reduce the ~~signal produced by binding of the macromolecule-bound analyte to the capture molecule coupled to~~fluorescent dye on the solid carrier.

4. (Previously presented) The method according to claim 3 comprising, after step a), a further step a') of removing the non-bound macromolecules.

5. (Canceled)

6. (Previously presented) The method according to claim 1, wherein the macromolecules are single-strand oligonucleotides of a length within the range from 40 to 80 nucleotides.

7. (Previously presented) The method according to claim 1, wherein the macromolecules are identical or non-identical.

8. (Previously presented) The method according to claim 1, wherein the analyte has a molecular weight of less than 5000 Dalton.

9. (Previously presented) The method according to claim 1, wherein the fluorescence dye is selected from the group of phenanthrenes, acridines, SYBR dyes or fluorophores.

10. (Previously presented) The method according to claim 1, wherein the solid carrier is permeable to light and the detection method is implemented by means of a transmitted-light method.

11. (Withdrawn) A device comprising a light source fitted on one side of a solid carrier inserted into the device, a filter disposed respectively between the light source and the solid carrier on the other side of the solid carrier, wherein the device is designed in such a manner that light passing through the solid carrier passes through an aperture into the human eye or into an optical instrument.

12. (Canceled)

13. (Previously presented) The method according to claim 3, wherein the macromolecules are single-strand oligonucleotides of a length within the range from 40 to 80 nucleotides.

14. (Previously presented) The method according to claim 3, wherein the macromolecules are identical or non-identical.

15. (Previously presented) The method according to claim 3, wherein the analyte has a molecular weight of less than 5000 daltons.

16. (Previously presented) The method according to claim 3, wherein the fluorescence dye is selected from the group of phenanthrenes, acridines, SYBR dyes or fluorophores.

17. (Previously presented) The method according to claim 3, wherein the solid carrier is permeable to light and the detection is implemented by means of a transmitted-light method.